SEQUENCE LISTING

<110> Eisenberg, Stephen P.
      Case, Casey C.
      Cox III, George N.
      Jamieson, Andrew
      Rebar, Edward J.
      Sangamo Biosciences, Inc.

<120> Selection of Sites for Targeting by Zinc Finger
      Proteins and Methods of Designing Zinc Finger Proteins
      to Bind to Preselected Sites

<130> 019496-001800US

<140> US 09/229,007
<141> 1999-01-12

<160> 97

<170> PatentIn Ver. 2.1

<210> 1
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
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      characterizing the C-2H-2 class of zinc finger
      proteins (ZFP)

<220>
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<222> (1)..(25)
<223> Xaa = any amino acid

<220>
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<222> (4)..(5)
<223> Xaa = any amino acid, may be present or absent

<220>
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<223> Xaa = any amino acid, may be present or absent

<400> 1
Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1   5   10   15

Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His
            20   25

<210> 2
<211> 5
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<213> Artificial Sequence

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<400> 2
Thr Gly Glu Lys Pro
  1               5


<210> 3
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 3
Gly Gly Gly Gly Ser
  1               5


<210> 4
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 4
Gly Gly Arg Arg Gly Gly Gly Ser
  1               5


<210> 5
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 5
Leu Arg Gln Arg Asp Gly Glu Arg Pro
  1               5


<210> 6
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 6
Leu Arg Gln Lys Asp Gly Gly Gly Ser Glu Arg Pro
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<210> 7
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:peptide linker

<400> 7
Leu Arg Gln Lys Asp Gly Gly Gly Ser Gly Gly Gly Ser Glu Arg Pro
1   5   10   15

<210> 8
<211> 85
<212> PRT
<213> Mus sp.

<220>
<223> DNA binding domain of mouse transcription factor
      Zif268

<400> 8
Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg Arg Phe Ser Arg Ser Asp
1   5   10   15

Glu Leu Thr Arg His Ile Arg Ile His Thr Gly Gln Lys Pro Phe Gln
            20   25   30

Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp His Leu Thr Thr
            35   40   45

His Ile Arg Thr His Thr Gly Glu Lys Pro Phe Ala Cys Asp Ile Cys
    50   55   60

Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg Lys Arg His Thr Lys Ile
65   70   75   80

His Leu Arg Gln Lys
                85

<210> 9
<211> 94
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:amino acids
      531-624 in Sp-1 transcription factor

<400> 9
Pro Gly Lys Lys Lys Gln His Ile Cys His Ile Gln Gly Cys Gly Lys
1   5   10   15

Val Tyr Gly Lys Thr Ser His Leu Arg Ala His Leu Arg Trp His Thr
            20   25   30

Gly Glu Arg Pro Phe Met Cys Thr Trp Ser Tyr Cys Gly Lys Arg Phe
            35   40   45

Thr Arg Ser Asp Glu Leu Gln Arg His Lys Arg Thr His Thr Gly Glu
   50   55   60

Lys Lys Phe Ala Cys Pro Glu Cys Pro Lys Arg Phe Met Arg Ser Asp
 65   70   75   80

His Leu Ser Lys His Ile Lys Thr His Gln Asn Lys Lys Gly
          85   90

<210> 10
<211> 98
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<220>
<223> Description of Artificial Sequence:Sp-1
      transcription factor consensus sequence

<400> 10
Met Glu Lys Leu Arg Asn Gly Ser Gly Asp Pro Gly Lys Lys Lys Gln
  1   5   10   15

His Ala Cys Pro Glu Cys Gly Lys Ser Phe Ser Lys Ser Ser His Leu
         20   25   30

Arg Ala His Gln Arg Thr His Thr Gly Glu Arg Pro Tyr Lys Cys Pro
       35   40   45

Glu Cys Gly Lys Ser Phe Ser Arg Ser Asp Glu Leu Gln Arg His Gln
    50   55   60

Arg Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Pro Glu Cys Gly Lys
 65   70   75   80

Ser Phe Ser Arg Ser Asp His Leu Ser Lys His Gln Arg Thr His Gln
         85   90   95

Asn Lys

<210> 11
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
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      binding site

<400> 11
gcgtgggcgc   10

<210> 12
<211> 10
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<220>
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      containing three D-able subsites

<400> 12
ggntgnggnn                                                      10


<210> 13
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site
      with two overlapping D-able subsites

<400> 13
nngkngknnn                                                      10


<210> 14
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site
      with three overlapping D-able subsites

<400> 14
nngkngkngk                                                      10


<210> 15
<211> 22
<212> DNA
<213> Artificial Sequence

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 15
gnggnngnnn nngnggnngn nn                                        22


<210> 16
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<212> DNA
<213> Artificial Sequence
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<220>
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      motif searched by protocol 1

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

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gnggnngnnn nnngnggnng nnn   23

<210> 17
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<212> DNA
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<210> 18
<211> 23
<212> DNA
<213> Artificial Sequence

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<400> 18
gnggnngnnn nnngnngngg nnn                                                    23
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<210> 19
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<212> DNA
<213> Artificial Sequence

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<400> 19
gnggnngnnn nngnggnngn gg                                                     22
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<210> 20
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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<400> 20
gnggnngnnn nnngnggnng ngg                                                    23
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<210> 21
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<220>
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      motif searched by protocol 1
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<400> 21
gnngnggnnn nngnggnngn nn                                              22


<210> 22
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<220>
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<400> 22
gnngnggnnn nnngnggnng nnn                                             23


<210> 23
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<212> DNA
<213> Artificial Sequence

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<400> 23
gnngnggnnn nngnngnggn nn                                              22
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<210> 24
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<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<400> 24
gnngnggnnn nnngnngngg nnn                                              23


<210> 25
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<220>
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<400> 25
gnngnggnnn nngnggnngn gg                                               22


<210> 26
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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      motif searched by protocol 1

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<223> n = g, a, c or t
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<400> 26
gnngnggnnn nnngnggnng ngg                                          23


<210> 27
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<212> DNA
<213> Artificial Sequence

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<220>
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<400> 27
gnngnngngg nnngnggnng nnn                                          23


<210> 28
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
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<223> n = g, a, c or t

<220>
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<222> (12)..(14)
<223> n = g, a, c or t, may be present or absent

<400> 28
gnngnngngg nnnngnggnn gnnn                                         24


<210> 29
<211> 23
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<213> Artificial Sequence
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<220>
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<220>
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<400> 29
gnngnngngg nnngnngngg nnn                                      23


<210> 30
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<212> DNA
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<220>
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<222> (12)..(14)
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<400> 30
gnngnngngg nnnngnngng gnnn                                     24


<210> 31
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<212> DNA
<213> Artificial Sequence

<220>
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<223> n = g, a, c or t

<220>
<221> modified_base
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<223> n = g, a, c or t, may be present or absent
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<400> 31
gnngnngngg nnngnggnng ngg                                              23


<210> 32
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<212> DNA
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<220>
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      motif searched by protocol 1

<220>
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<222> (1)..(24)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (12)..(14)
<223> n = g, a, c or t, may be present or absent

<400> 32
gnngnngngg nnnngnggnn gngg                                             24


<210> 33
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 1

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<223> n = g, a, c or t

<400> 33
gnngnngngg nggnngnnn                                                   19


<210> 34
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
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      motif searched by protocol 1

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<222> (1)..(19)
<223> n = g, a, c or t

<400> 34
gnngnngngg nngnggnnn                                                   19
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<210> 35
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 1

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<223> n = g, a, c or t

<400> 35
gnngnngngg nngnngngg                                              19


<210> 36
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 36
knggnnknnn nnknggnnkn nn                                          22


<210> 37
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent
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<400> 37
knggnnknnn nnnknggnnk nnn                                          23


<210> 38
<211> 22
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<220>
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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 38
knggnnknnn nnknnknggn nn                                           22


<210> 39
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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      motif searched by protocol 2

<220>
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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 39
knggnnknnn nnnknnkngg nnn                                          23


<210> 40
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2
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<223> n = g, a, c or t

<220>
<221> modified_base
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<223> n = g, a, c or t, may be present or absent

<400> 40
knggnnknnn nnknnknnkn gg                                          22


<210> 41
<211> 23
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<213> Artificial Sequence

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 41
knggnnknnn nnnknnknnk ngg                                         23


<210> 42
<211> 22
<212> DNA
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<220>
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      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 42
knnknggnnn nnknggnnkn nn                                          22
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<210> 43
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<213> Artificial Sequence

<220>
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      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
<221> modified_base
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<223> n = g, a, c or t, may be present or absent

<400> 43
knnknggnnn nnnknggnnk nnn                                          23


<210> 44
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<223> n = g, a, c or t

<220>
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<400> 44
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<210> 45
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<223> n = g, a, c or t
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<220>
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<400> 45
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<210> 46
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
<221> modified_base
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<223> n = g, a, c or t, may be present or absent

<400> 46
knnknggnnn nnknnknnkn gg                                            22


<210> 47
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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      motif searched by protocol 2

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<223> n = g, a, c or t

<220>
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<400> 47
knnknggnnn nnnknnknnk ngg                                           23


<210> 48
<211> 22
<212> DNA
<213> Artificial Sequence
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<220>
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<223> n = g, a, c or t

<220>
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<222> (11)..(12)
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<400> 48
knnknnkngg nnknggnnkn nn   22

<210> 49
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<212> DNA
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<220>
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<223> n = g, a, c or t

<220>
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<400> 49
knnknnkngg nnnknggnnk nnn   23

<210> 50
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      motif searched by protocol 2

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<400> 50
knnknnkngg nnknnknggn nn                                              22


<210> 51
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
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<223> n = g, a, c or t

<220>
<221> modified_base
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<223> n = g, a, c or t, may be present or absent

<400> 51
knnknnkngg nnnknnkngg nnn                                             23


<210> 52
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<223> n = g, a, c or t

<220>
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<400> 52
knnknnkngg nnknnknnkn gg                                              22


<210> 53
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2
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<220>
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<222> (1)..(23)
<223> n = g, a, c or t

<220>
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<400> 53
knnknnkngg nnnknnknnk ngg                                              23


<210> 54
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<213> Artificial Sequence

<220>
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      motif searched by protocol 2

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<223> n = g, a, c or t

<400> 54
knnknnkngg nggnnknnn                                                   19


<210> 55
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2

<220>
<221> modified_base
<222> (1)..(19)
<223> n = g, a, c or t

<400> 55
knnknnkngg nnknggnnn                                                   19


<210> 56
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 2
```

```
<220>
<221> modified_base
<222> (1)..(19)
<223> n = g, a, c or t

<400> 56
knnknnkngg nnknnkngg                                                    19


<210> 57
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 57
kngknnknnn nnkngknnkn nn                                                22


<210> 58
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 58
kngknnknnn nnnkngknnk nnn                                               23


<210> 59
<211> 22
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 59
kngknnknnn nnknnkngkn nn                                       22


<210> 60
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 60
kngknnknnn nnnknnkngk nnn                                      23


<210> 61
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent
```

```
<400> 61
kngknnknnn nnknnknnkn gk                                                22


<210> 62
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 62
kngknnknnn nnnknnknnk ngk                                               23


<210> 63
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 63
knnkngknnn nnkngknnkn nn                                                22


<210> 64
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3
```

```
<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 64
knnkngknnn nnnkngknnk nnn                                              23


<210> 65
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 65
knnkngknnn nnknnkngkn nn                                               22


<210> 66
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 66
knnkngknnn nnnknnkngk nnn                                              23
```

```
<210> 67
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (10)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 67
knnkngknnn nnknnknnkn gk                                              22


<210> 68
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 68
knnkngknnn nnnknnknnk ngk                                             23


<210> 69
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t
```

```
<220>
<221> modified_base
<222> (11)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 69
knnknnkngk nnkngknnkn nn                                    22


<210> 70
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (12)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 70
knnknnkngk nnnkngknnk nnn                                   23


<210> 71
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 71
knnknnkngk nnknnkngkn nn                                    22


<210> 72
<211> 23
<212> DNA
<213> Artificial Sequence
```

```
<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (12)..(13)
<223> n = g, a, c or t, may be present or absent

<400> 72
knnknnkngk nnnknnkngk nnn                                          23


<210> 73
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(22)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (11)..(12)
<223> n = g, a, c or t, may be present or absent

<400> 73
knnknnkngk nnknnknnkn gk                                           22


<210> 74
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(23)
<223> n = g, a, c or t

<220>
<221> modified_base
<222> (12)..(13)
<223> n = g, a, c or t, may be present or absent
```

```
<400> 74
knnknnkngk nnnknnknnk ngk                                          23


<210> 75
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(19)
<223> n = g, a, c or t

<400> 75
knnknnkngk ngknnknnn                                               19


<210> 76
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(19)
<223> n = g, a, c or t

<400> 76
knnknnkngk nnkngknnn                                               19


<210> 77
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site DNA
      motif searched by protocol 3

<220>
<221> modified_base
<222> (1)..(19)
<223> n = g, a, c or t

<400> 77
knnknnkngk nnknnkngk                                               19
```

```
<210> 78
<211> 10
<212> DNA
<213> Glycine max

<220>
<223> soybean FAD2-1 cDNA ZFP target segment FAD 1

<400> 78
gaggtagagg                                                      10


<210> 79
<211> 10
<212> DNA
<213> Glycine max

<220>
<223> soybean FAD2-1 cDNA target segment FAD 2

<400> 79
gtcgtgtgga                                                      10


<210> 80
<211> 10
<212> DNA
<213> Glycine max

<220>
<223> soybean FAD2-1 cDNA target segment FAD 3

<400> 80
gttgaggaag                                                      10


<210> 81
<211> 10
<212> DNA
<213> Glycine max

<220>
<223> soybean FAD2-1 cDNA target segment FAD 4

<400> 81
gaggtggaag                                                      10


<210> 82
<211> 10
<212> DNA
<213> Glycine max

<220>
<223> soybean FAD2-1 cDNA target segment FAD 5

<400> 82
taggtggtga                                                      10
```

```
<210> 83
<211> 12
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:test sequence

<400> 83
agtgcgcggt gc                                                        12


<210> 84
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site
      with base immediately to the 3' side of target
      site

<400> 84
agtgcgcggt                                                           10


<210> 85
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site
      with base immediately to the 3' side of target
      site

<400> 85
gtgcgcggtg                                                           10


<210> 86
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:target site
      with base immediately to the 3' side of target
      site

<400> 86
tgcgcggtgc                                                           10


<210> 87
<211> 10
<212> DNA
<213> Artificial Sequence
```

<220>
<223> Description of Artificial Sequence:target site
      with base immediately to the 3' side of target
      site

<220>
<221> modified_base
<222> (10)
<223> n = undefined

<400> 87
gcgcggtgcn   10

<210> 88
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:finger F3 for
      ordered output from optimal design target site

<400> 88
Glu Arg Asp His Leu Arg Thr
  1   5

<210> 89
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:finger F2 for
      ordered output from optimal design target site

<400> 89
Arg Ser Asp Glu Leu Gln Arg
  1   5

<210> 90
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:finger F1 for
      ordered output from optimal design target site

<400> 90
Arg Lys Asp Ser Leu Val Arg
  1   5

<210> 91
<211> 7
<212> PRT
<213> Artificial Sequence

```
<220>
<223> Description of Artificial Sequence:finger for
      disordered output from optimal design target site

<400> 91
Arg Ser Asp Glu Leu Thr Arg
  1               5


<210> 92
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:finger for
      disordered output from optimal design target site

<400> 92
Arg Ser Asp Glu Arg Lys Arg
  1               5


<210> 93
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:three finger
      ZFP design using F3, F2 and F1 fingers for ordered
      output from optimal design target site

<400> 93
Arg Lys Asp Ser Leu Val Arg Arg Ser Asp Glu Leu Gln Arg Glu Arg
  1               5                   10                  15

Asp His Leu Arg Thr
            20


<210> 94
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:ZFP sequence
      (F1, F2 and F3) from SBS design GR-223

<400> 94
Arg Ser Ala Asp Leu Thr Arg Arg Ser Asp His Leu Thr Arg Glu Arg
  1               5                   10                  15

Asp His Leu Arg Thr
            20
```

```
<210> 95
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:ZFP sequence
      (F1, F2 and F3) from Zif 268

<400> 95
Arg Ser Asp Glu Leu Thr Arg Arg Ser Asp His Leu Thr Thr Arg Ser
 1               5                  10                  15

Asp Glu Arg Lys Arg
            20



<210> 96
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:ZFP sequence
      (F1, F2, F3) from SP1

<400> 96
Lys Thr Ser His Leu Arg Ala Arg Ser Asp Glu Leu Gln Arg Arg Ser
 1               5                  10                  15

Asp His Leu Ser Lys
            20



<210> 97
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:ZFP sequence
      (F1, F2, F3) from SBS design GL-8.3.1

<400> 97
Arg Lys Asp Ser Leu Val Arg Thr Ser Asp His Leu Ala Ser Arg Ser
 1               5                  10                  15

Asp Asn Leu Thr Arg
            20
```